BRUHAT BENGALURU MAHANAGARA PALIKE

YELAHANKA ZONE

DIVISION: BYATARAYANAPURA

SUB DIVISION: KODIGEHALLI

***Name of Work**: Estimate For Improvements To Roads And Drains In Kodigehalli And Surrounding Areas In Ward No. 12- Kodigehalli*

ESTIMATED COST: Rs.20 Lakhs

BRUHAT BANGALORE MAHANAGARA PALIKE

Executive Engineer-Byatarayanapura

Detailed Estimate

Name of the Work : Improvement of Road & drains in Kodigehalli and sorrounding areas in word no 12 Kodigehalli

							Estimate Amount :		2000000.00
Sl. No.	Particulars	Unit	Nos	L in m	B in m	D in m	Quantity	Rate in Rs	Total Amount in Rs
	Drain								
1	Removing and Resetting of Footpath Slab and pointing in C.M (1:3) (Approved Rate)								
		Sqm							
	Approved Rate	235							
	Area Weightage 10%	23.50							
	Total	258.50							
	CP Layout								
	4th Cross Road(Jalajeramma Temple)		2	209.00	1.20		501.6		
	5th Cross Road(Kidzee School)		2	207.00	1.20		496.8		
	Codigehalli 1st Main Road to 1st A cross Road)		2	289.00	1.20		693.6		
	1st Cross Road		2	227.00	1.20		544.8		
	2nd Cross Road		2	437.00	1.20		1048.8		
	Kodigehalli 4th Cross Road (CP Layout)		2	125.00	1.20		300		
	Kodigehalli 5th Cross Road (CP Layout)		2	124.00	1.20		297.6		
							2884.8		
	Deduct 20% Missing/Damaged Slab						576.96		
							2307.84	258.5	596576.64
2	Earth work excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work.								
	(Page No. 5, Sl.No.1.4.1 of KPWD S.R 2021-22.Volume-1).								
		Cum							
	Basic rate	*186.00*							
	Area Wieght age @ 10%	*18.60*							
	Total Rate in Rs	*204.60*							
	Drain Desilting								
	CP Layout								
	4th Cross Road(Jalajeramma Temple)		2	209.00	0.60	0.40	100.32		
	5th Cross Road(Kidzee School)		2	207.00	0.60	0.40	99.36		
	Kodigehall 1st Main Road to 1st A cross Road)		2	190.00	0.60	0.40	91.20		
	LHS 1st Cross Road		2	227.00	0.60	0.40	108.96		
	Kodigehalli 4th Cross Road (CP Layout)		2	125.00	0.60	0.40	60.00		
	Kodigehalli 5th Cross Road (CP Layout)		2	124.00	0.60	0.40	59.52		
	Culvert								
	LHS 1st Cross Road Jn		1	6.00	1.40	1.20	10.08		

	1st Main Road and 1st Cross Rd Jn.		1	6.50	1.40	1.20	10.92		
	Kodigehalli 4th Cross Road (CP Layout)		1	5.50	1.40	1.20	9.24		
	Kodigehalli 5th Cross Road (CP Layout)		1	5.00	1.40	1.20	8.40		
							558.00	204.60	114166.80
3	**Providing B S slabs of selected quality roughly dressed having a size of 10 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete. as directed by the Engineer in Charge of the work (excluding GST and Area Leading Charges)**								
	Approved Rate on 18-06-2022								
		Sqm							
	Aapproved rate	***837.00***							
	Area weightage 10%	***83.70***							
	Total	920.70							
	Wall								
	Considering the Quantity from Item No.1(Damaged slab)						576.96	920.70	531207.07
4	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately) Mix 1:3:6 (M10) Using 40 mm nominal size graded crushed coarse aggregates (V-1, P.No-15, I No-2.1.3 of PWD SR 2021-22)								
	Basic Rate	5752.00 ✓							
	Area Weightage 10%	575.20							
	Total Rate	6327.20							
	Culvert								
	LHS 1st Cross Road Jn		1	6.00	1.10	0.15	0.99		
	1st Main Road and 1st Cross Rd Jn.		1	6.50	1.10	0.15	1.07		
	Kodigehalli 4th Cross Road (CP Layout)		1	5.50	1.10	0.15	0.91		
	Kodigehalli 5th Cross Road (CP Layout)		1	6.00	1.10	0.15	0.99		
							3.96	6327.20	25055.71
5	**Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. M20 (The cost of steel reinforcement & formwork to be paid separately) (PWD SR 2021-22 Vol -I Pg 17 item no 2.4.2)**								
		Cum							
	Basic rate	***6256.00*** ✓							
	For Form Work	***312.80***							
	Sub Total	***6568.80***							
	Area Wieght age @ 10%	*656.88*							
	Total Rate in Rs	***7225.68***							
	Culvert								
	Bottom Raft								
	LHS 1st Cross Road Jn		1	6.00	*0.90*	*0.15*	*0.81*		
	1st Main Road and 1st Cross Rd Jn.		1	6.50	*0.90*	*0.15*	*0.88*		
	Kodigehalli 4th Cross Road (CP Layout)		1	5.50	*0.90*	*0.15*	*0.74*		
	Kodigehalli 5th Cross Road (CP Layout)		1	6.00	*0.90*	*0.15*	*0.81*		
							3.24		
	Side Wall								
	LHS 1st Cross Road Jn	Cum	*2.00*	6.00	*0.15*	*0.60*	*1.08*		

	1st Main Road and 1st Cross Rd Jn.	Cum	2.00	6.50	0.15	0.60	1.17		
	Kodigehalli 4th Cross Road (CP Layout)	Cum	2.00	5.50	0.15	0.60	0.99		
	Kodigehalli 5th Cross Road (CP Layout)	Cum	2.00	6.00	0.15	0.60	1.08		
							4.32		
							7.56	7225.68	54626.14
6	**Supplying,** Fitting and Placing un-coated TMT bar Reinforcement in sub-structure complete as per Drawing and Technical Specifications.(V-III, I.No 13.1 Page No 99, PWD SR 2021-22) issue rate dated 07-04-22								
	Basic Rate	103329.00							
	Area Weightage 10%	10332.90							
	Total Rate	113661.90							
	For Culvert	Cum					7.56		
		kg	Steel assumed 90 Kg/Cum of Concrete				680.40		
		tonne				Tn	0.68		
							0.68	113661.90	77,335.56
7	Providing and Fixing pre cast covering Slab 230mm thick made out of CC , Jelly 20mm Down Size with steel reinforcement including form work, curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc, complete as per Engineer incharge. (Data Rate)								
		Sqm							
	Data Rate	5037.00							
	Culvert cover Slab								
	LHS 1st Cross Road Jn		1	6.00	1.2		7.2		
	1st Main Road and 1st Cross Rd Jn.		1	6.00	1.2		7.2		
	Kodigehalli 4th Cross Road (CP Layout)		1	5.50	1.2		6.6		
	Kodigehalli 5th Cross Road (CP Layout)		1	6.00	1.2		7.2		
							28.2	5037	142043.4
8	Cost of Haulage Excluding Loading and Unloading Taking output 10 t load and lead 10 km = 100 t.km (V-III Page No.3, Item No.1.4 A of PWD SR 2021-22)								
		t.km							
	Basic Rate	12.00							
	8KM Lead = 12*8	96.00							
	Area Weightage 10%	9.60							
	Total Rate	105.60							
	Qty frm Item No-1 & 2			1134.96	1.28		1452.75	105.60	153410.27
									1694421.59
							18%gst		304995.89
							Missalaneous & Rounding		582.52
							Total Ammount		2000000.00

JEN(2)

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Administrative Approval
Accorded For 20.00 Lakhs only
Head of A/C P3726
CER NO : 114 Dt 16/09/22

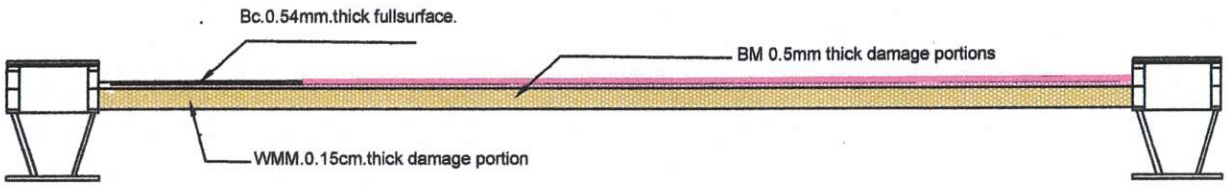
TA

CE (NK)

TECHNICAL SANCTION
Accorded For Rs 20.00 Lakhs only
Head of A/C P3726
Div. Ref. No. 49 Date 16/09/22

AE

EE(BTP)



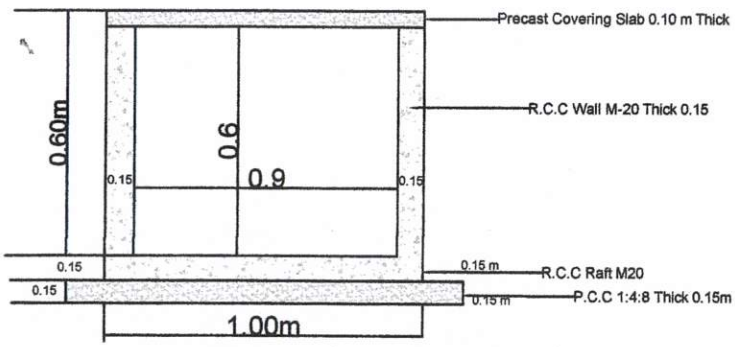
CROSS SECTION OF ASPHALT ROAD

Aartn Associates

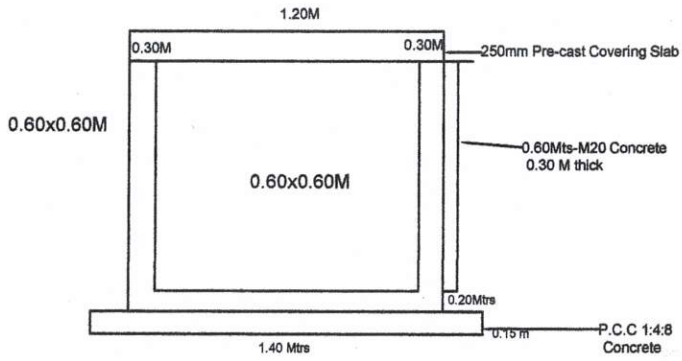
Assistant Engineer

Assistant Executive Engineer
Yelahanka Zone
Bangalore-92

CLIENT: BRUHAT BANGALORE MAHANAGARA PALIKE	CONSULTANT:- AARTN ASSOCIATES	PROJECT:-	Prepared by Designed by Checked by Reviewed by Date	TITLE : Cross section details of Asphalt Road GO Sl No. : SCALE : NTS	Revisions Rev / Date / Description



TYPICAL CROSS SECTION OF DRAIN



TYPICAL CROSS SECTION OF RCC CULVERT

Aartn Associates

Assistant Engineer

Assistant Executive Engineer
Yelahanka Zone
Bangalore-64

CLIENT:-		TITLE:	Revisions		
BRUHAT BANGALORE MAHANAGARA PALIKE		TYPICAL CROSS SECTION OF & DRAIN RCC Culvert	Rev.	Date	Description
			R0		Initial Drawing for Approv
		SCALE:			